

E000P-971092-01  
Date: 12/03/97

**MODIFICATION REVIEW**

**For**

**BEAMLINE**  
**PERSONNEL SAFETY SYSTEM**

**ARGONNE NATIONAL LABORATORY**  
**ADVANCED PHOTON SOURCE**  
**EXPERIMENTAL FACILITIES**

**E000P-971092-01**

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Modification Review for Beamline Personnel Safety System

PREPARED BY:

_____ Roy Emerson, Software Section Leader, APS/XFD/ISI	_____ Date
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REVIEWED BY:

_____ George Srajer, PSS Safety Committee Chairman, APS/XFD/SRI	_____ Date
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_____ John Stoffel, PSS Design Engineer, APS/XFD/ISI	_____ Date
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_____ Nick Friedman, Interlock Systems Section Leader (acting), XFD/ISI	_____ Date
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APPROVED BY:

_____ Jon Hawkins, Group Leader, APS/XFD/ISI	_____ Date
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**Modification Review for Beamline Personnel Safety System**

PSS Change Request  
03 December 1997

1. PSS Change

Chain A:

This change will add a timer to the program to de-bounce the 60 PSI manifold pressure switch. The de-bounce period will initially be set at 3 seconds. However, the de-bounce period must not be longer than the timer period set for the shutter open operation.

Chain B:

Chain B is not affected and operates properly under this condition.

2. Reasons for the PSS Change.

Experience has shown under actual operating conditions that there is a significant negative pressure spike which occurs during a shutter open operation. This momentary pressure drop is sufficient to cause a fault to be generated by the Chain-A PLC. This change is required to correct the program behavior to that which is expected and eliminate the spurious faults from occurring.

3. Extent of the PSS Change

This change will affect all Chain A Beamline code written or modified on or after 01 March 1998.

4. Method of Implementation

The changes will be applied using the existing Software Change Request mechanism as defined in the Software Configuration Management Procedures document E000P-921130-01 dated 03/25/96 for the Interlock Systems and Instrumentation Group.